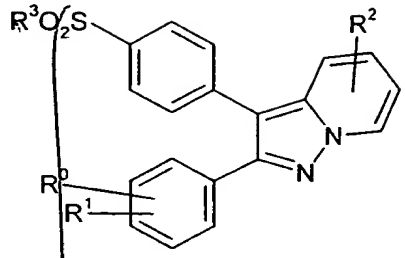
Claims

1. Compounds of formula (I)



(I)

and pharmaceutically acceptable derivatives thereof in which:

R^0 and R^1 are independently selected from H, halogen, C_{1-6}alkyl, C_{1-6}alkoxy, or C_{1-6}alkoxy substituted by one or more fluorine atoms;
R^2 is H, C_{1-6}alkyl, C_{1-6}alkyl substituted by one or more fluorine atoms, C_{1-6}alkoxy, C_{1-6}hydroxyalkyl, SC_{1-6}alkyl, C(O)H, $C(O)C_{1-6}$alkyl, C_{1-6}alkylsulphonyl, C_{1-6}alkoxy substituted by one or more fluorine atoms; and
R^3 is C_{1-6}alkyl or NH_2.

2. Compounds as claimed in claim 1 wherein R^0 and R^1 are independently H, halogen, C_{1-6}alkyl, or C_{1-6}alkoxy; R^2 is C_{1-3}alkyl substituted by one or more fluorine atoms; and R^3 is C_{1-3}alkyl or NH_2.

3. Compounds as claimed in claim 1 or 2 wherein R^0 and R^1 are independently H, F, Cl, C_{1-3}alkyl (e.g. methyl), or C_{1-3}alkoxy (e.g. ethoxy); R^2 is C_{1-3}alkyl substituted by one or more fluorine atoms (e.g. trifluoromethyl); and R^3 is methyl or NH_2.

4. Compounds as claimed in any one of claims 1 to 3 wherein R^0 is F, Cl, or C_{1-3}alkyl (e.g. methyl) or C_{1-3}alkoxy (e.g. ethoxy); R^1 is H; R^2 is C_{1-3}alkyl substituted by one or more fluorine atoms (e.g. trifluoromethyl); and R^3 is methyl or NH_2.

5. Compounds as claimed in any one of claims 1 to 4 wherein R^0 is at the 3- or 4- position of the phenyl ring; and R^2 is at the 6- position of the pyridine ring.

6. 4-[2-(3-fluoro-phenyl)-6-trifluoromethyl-pyrazolo[1,5-a]pyridin-3-yl]-benzenesulfonamide;
2-(3-fluoro-phenyl)-3-(4-methanesulfonyl-phenyl)-6-trifluoromethyl-pyrazolo[1,5-a]pyridine;
4-[2-(4-ethoxy-phenyl)-6-trifluoromethyl-pyrazolo[1,5-a]pyridin-3-yl]-benzenesulfonamide;
4-[2-(4-fluoro-phenyl)-6-trifluoromethyl-pyrazolo[1,5-a]pyridin-3-yl]-benzenesulfonamide;
2-(4-fluoro-phenyl)-3-(4-methanesulfonyl-phenyl)-6-trifluoromethyl-pyrazolo[1,5-a]pyridine;
4-(2-phenyl-6-trifluoromethyl-pyrazolo[1,5-a]pyridin-3-yl)-benzenesulfonamide;
3-(4-methanesulfonyl-phenyl)-2-phenyl-6-trifluoromethyl-pyrazolo[1,5-a]pyridine;
4-[2-(4-methyl-phenyl)-6-trifluoromethyl-pyrazolo[1,5-a]pyridin-3-yl]-benzenesulfonamide;
and pharmaceutically acceptable derivatives thereof.

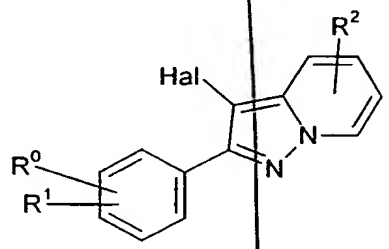
7. N-acetyl-4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;
N-acetyl-4-[2-(4-ethoxyphenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;
N-acetyl-4-[2-phenyl-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;
sodium salt of N-acetyl-4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;
4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]-N-(2-methoxyacetyl)benzenesulfonamide;
4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]-N-propionylbenzenesulfonamide;
4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]-N-isobutyrylbenzenesulfonamide;
N-benzoyl-4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;
methyl 4-[({4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]phenyl}sulfonyl)amino]-4-oxobutanoate;

4-[({4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]phenyl}sulfonyl)amino]-4-oxobutanoic acid;
4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]-N-pentanoylbenzenesulfonamide;
2-[({4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]phenyl}sulfonyl)amino]-2-oxoethyl acetate;
N-acetyl-4-[2-(4-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;
N-(2-chloroacetyl)-4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;
N-[2-(diethylamino)acetyl]-4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;
methyl {4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]phenyl}sulfonylcarbamate; and
tert-butyl {4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]phenyl}sulfonylcarbamate.

8. 4-[6-chloro-2-(3-ethoxyphenyl)pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;
6-chloro-2-(3-ethoxyphenyl)-3-[4-(methylsulfonyl)phenyl]pyrazolo[1,5-a]pyridine;
4-[6-methyl-2-phenyl-pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;
4-[2-(3-fluorophenyl)-6-methyl-pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;
4-[2-(3-ethoxyphenyl)-6-methyl-pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;
4-[2-(4-ethoxyphenyl)-6-methyl-pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;
6-methyl-2-phenyl -3-[4-(methylsulfonyl)phenyl]pyrazolo[1,5-a]pyridine;
2-(3-fluorophenyl)-6-methyl-3-[4-(methylsulfonyl)phenyl]pyrazolo[1,5-a]pyridine;
2-(3-ethoxyphenyl)-6-methyl-3-[4-(methylsulfonyl)phenyl]pyrazolo[1,5-a]pyridine;
2-(4-ethoxyphenyl)-6-methyl-3-[4-(methylsulfonyl)phenyl]pyrazolo[1,5-a]pyridine;
and pharmaceutically acceptable derivatives thereof.

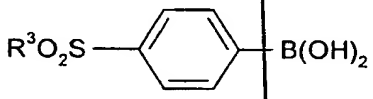
9. A process for the preparation of compounds of formula (I) and pharmaceutically acceptable derivatives thereof as defined in any one of claims 1 to 8, which comprises:

(A) reacting a compound of formula (II)



(II)

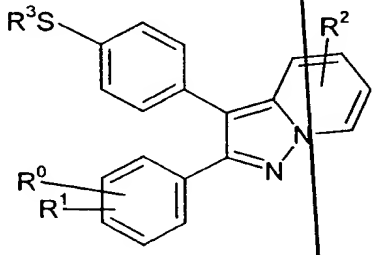
or a protected derivative thereof, with a compound of formula (III)



(III)

or a protected derivative thereof; or

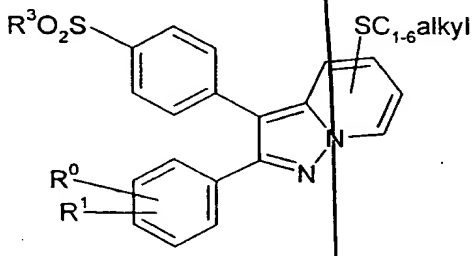
(B) where R^3 represents C_{1-4}alkyl, reacting a compound of formula (IV)



(IV)

or a protected derivative thereof with an oxidising agent; or

(C) where R^2 is C_{1-6}alkylsulphonyl, oxidising a compound of formula (V)



(V)

or a protected derivative; or

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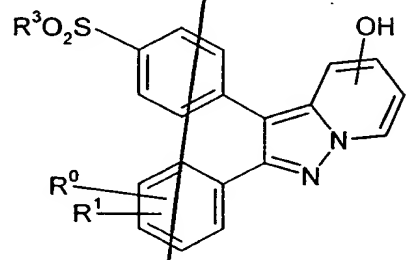
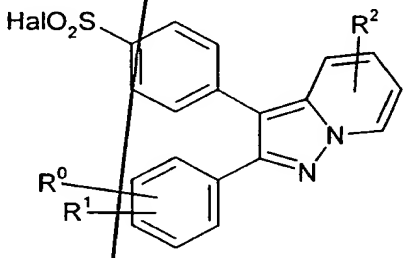
(D) where R^2 is C_{1-6}alkoxy substituted by one or more fluorine atoms, reacting a alcohol of formula (VI)



(VI)

or a protected derivative thereof with a halofluoroalkane; or

(E) where R^3 is NH_2, reacting a compound of formula (X)



(X)

with a source of ammonia under conventional conditions; or

(F) interconversion of a compound of formula (I) into another compound of formula (I); or

(G) deprotecting a protected derivative of compound of formula (I);

and optionally converting compounds of formula (I) prepared by any one of processes (A) to (G) into pharmaceutically acceptable derivatives thereof.

10. A pharmaceutical composition comprising a compound of formula (I) or a pharmaceutically acceptable derivative thereof as defined in any one of claims 1 to 8 in admixture with one or more physiologically acceptable carriers or excipients.

11. A compound of formula (I) or a pharmaceutically acceptable derivative thereof as defined in any one of claims 1 to 8 for use in human or veterinary medicine.

12. A compound of formula (I) or a pharmaceutically acceptable derivative thereof as defined in any one of claims 1 to 8 for use in the treatment of a condition which is mediated by selective inhibition of COX-2.

13. A method of treating a human or animal subject suffering from a condition which is mediated by selective inhibition of COX-2 which comprises administering to said subject an effective amount of a compound of formula (I) or a pharmaceutically acceptable derivative as defined in any one of claims 1 to 8.

14. A method of treating a human or animal subject suffering from an inflammatory disorder, which method comprises administering to said subject an effective amount of a compound of formula (I) or a pharmaceutically acceptable derivative thereof as defined in any one of claims 1 to 8.

15. The use of a compound of formula (I) or a pharmaceutically acceptable derivative thereof as defined in any one of claims 1 to 8 for the manufacture of a therapeutic agent for the treatment of a condition which is mediated by selective inhibition of COX-2.

16. The use of a compound of formula (I) or a pharmaceutically acceptable derivative thereof as defined in any one of claims 1 to 8 for the manufacture of a therapeutic agent for the treatment of an inflammatory disorder.